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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,006	08/21/2001	Pankaj Mathur	07844-486001	9089

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EXAMINER

CUNNINGHAM, GREGORY F

ART UNIT	PAPER NUMBER
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2676

3

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/935,006

Applicant(s)

MATHUR ET AL.

Examiner

Greg Cunningham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 August 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-59 is/are rejected.
- 7) ☒ Claim(s) 21 and 50 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

1. This action is responsive to communications of application filed 8/21/2001.
2. The disposition of the claims is as follows: claims 1-59 are pending in the application. Claims 1, 30 and 59 are independent claims.
3. The group and/or Art Unit location of your application has changed. To aid in the correlation of any papers for this application, all further correspondence should be directed to Group Art Unit 2676 (effective 9/03). Please be sure to use the most current art unit number on all correspondence to help us route your case and respond to you in a timely fashion.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-12, 16-19, 22-25, 29-41, 45-48, 51-54, 58 and 59 are rejected under 35 U.S.C. 102(b) as being disclosed by Suzuki et al., (US Patent Number 5,982,379), hereafter Suzuki.

- A. Claim 1, “A computer-implemented method for defining a ... and second set of values are distinct” is disclosed in col. 10, lns. 9-18. Wherein slope corresponds to gradient and slope values correspond to gradient attributes.

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- B. Claim 2, "The method of claim 1, further comprising: rendering the ... for the set of gradient attributes" is disclosed supra for claim 1. (As shown and rendered in Fig. 10)
- C. Claim 3, "The method of claim 2, further comprising: applying the ... to fit the region" is disclosed supra for claim 2 and in col. 7, lns. 40-64. Wherein region is shown in Fig. 6 as identifier 1200; and wherein color component characteristics is specified or modified, units update their corresponding correction curves and furthermore area 1200 displays image based upon updated correction/specification curves corresponds to scaling the gradient to fit the region.
- D. Claim 4, "The method of claim 3, wherein the region corresponds to an object" is disclosed supra for claim 3 and in col. 7, lns. 33-37.
- E. Claim 5, "The method of claim 2, further comprising: applying one or ... until the region is covered" is disclosed supra for claim 3. Wherein RGB (red, green and blue) correspond to one or more copies.
- F. Claim 6, "The method of claim 5, wherein the region corresponds to an object" is disclosed supra for claim 5 and in col. 7, lns. 33-37.
- G. Claim 7, "The method of claim 5, wherein each copy ... to the rendered gradient" is disclosed supra for claim 5. Wherein RGB (red (1202), green (1204) and blue (1206)) correspond with identical size and shape.
- I. Claim 8, "The method of claim 1, wherein the first and second set of values are different" is disclosed supra for claim 1, particularly at "In addition, a first slope at the starting point  $t_{sub.a}$  has a value 0.5 or 1.5. A second slope at the ending point  $t_{sub.e}$  has a value 0.5 or 1.5." Wherein slope corresponds to gradient and slope values correspond to gradient attributes.

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J. Claim 9, "The method of claim 1, wherein the first and second set of values are defined by a user input" is disclosed supra for claim 1 and in col. 7, lns. 20-39.

K. Claim 10, "The method of claim 1, further comprising: defining a third set of ... between two intermediary points" is disclosed supra for claim 1. Wherein first and third middle points correspond to two intermediary points, and second middle point positional value determines/corresponds defining transition.

L. Claim 11, "The method of claim 9, further comprising: rendering the ... and a third set of attributes" is disclosed supra for claim 9. (As shown and rendered in Fig. 10)

M. Claim 12, "The method of claim 1, wherein the color gradient is ... to be applied" is disclosed supra for claim 1 and in col. 1, ln. 54 – col. 2, ln. 9 and col. 6, lns. 60-63. Wherein starting point and ending point correspond to opposite corners of bounding box.

N. Claim 16, "The method of claim 1, wherein the set of attributes ... and the ending point" is disclosed supra for claims 1 and in col. 7, lns. 40-64. Wherein RGB (red, green and blue) correspond to a color for one or more ... point.

O. Claim 17, "The method of claim 16, wherein the set of attributes ... with an adjacent point" is disclosed supra for claim 16. Wherein RGB (red, green and blue) correspond to associated color.

P. Claim 18, "The method of claim 17, wherein the color ... color components ... with an adjacent point" is disclosed supra for claim 17. Wherein RGB (red, green and blue) correspond to associated color components.

Q. Claim 19, "The method of claim 16, wherein the set of ... constant color attribute ... remains constant" is disclosed supra for claim 16 and in col. 3, lns. 6-13.

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R. Claim 22, "The method of claim 1, wherein the set of attributes ... color function attribute ... in the color gradient" is disclosed supra for claim 1; in col. 2, ln. 3; and in col. 8, ln. 1 – col. 9, ln. 63.

S. Claim 23, "The method of claim 22, wherein defining ... non-linear mathematical function" is disclosed supra for claim 22. Wherein exponent of equation (5) is two, and that of equation at col. 2, ln. 3 is three, therefore non-linear.

T. Claim 24, "The method of claim 22, wherein defining ... in the color gradient" is disclosed supra for claims 22 and 3.

U. Claim 25, "The method of claim 22, wherein defining ... the mathematical function" is disclosed supra for claims 22 and in col. 2, lns. 49-50; and in col. 3, lns. 27-31.

V. Claim 29, "The method of claim 1, further comprising: defining a mathematical function ... having constant color" is disclosed supra for claims 1 and in col. 8, ln. 1 – col. 9, ln. 63.

W. Per independent claim 30, this is directed to a computer program product for performing the method of independent claim 1, and therefore is rejected to independent claim 1.

X. Per dependent claims 31-41, 45-48, 51-54 and 58, these are directed to a computer program product for performing the method of dependent claims 2-12, 16-19, 22-25 and 29 and therefore are rejected to dependent claims 2-12, 16-19, 22-25 and 29.

Y. Claim 59, "The computer-implemented method for rendering a color gradient ... one intermediary point" is disclosed supra for claims 1, 17 and 18.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13-15, 20, 26-28, 42-44, 49 and 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al., (US Patent Number 5,982,379), as applied to claims 1 and 30 above, and further in view of Sakamoto, (US Patent Number 6,201,550B1).

A. Claim 13, “The method of claim 1, wherein the color gradient is a radial ... to be applied” is disclosed by Suzuki supra for claim 1. However Suzuki does not appear to disclose “wherein the color gradient is a radial ... to be applied”, but Sakamoto does in col. 9, lns. 46-56; col. 17, 37-51 and col. 29, ln. 56 – col. 21, ln. 21.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply color gradients disclosed by Suzuki in combination with concentric (radial) color gradient disclosed by Sakamoto, and motivated to combine the teachings because it would reduce the load for drawing a gradation as revealed in col. 2, lns. 8-11.

B. Claim 14, “The method of claim 13, wherein defining a value of the offset includes: ... horizontal ... of the bounding box” is disclosed by Suzuki and Sakamoto supra for claim 13. Wherein vector (horizontal and vertical components) displacement corresponds to horizontal direction relative to center of bounding box.

C. Claim 15, “The method of claim 13, wherein defining a value of the offset includes: ... vertical ... of the bounding box” is disclosed by Suzuki and Sakamoto supra for claim 13.

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Wherein vector (horizontal and vertical components) displacement corresponds to vertical direction relative to center of bounding box.

D. Claim 20, "The method of claim 16, wherein the set of attributes ... in the color gradient" is disclosed by Suzuki supra for claim 16. However Suzuki does not appear to disclose "wherein the set of attributes ... in the color gradient", but Sakamoto does in col. 3, lns. 2-16. Wherein cross/crossing corresponds to traversal.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply color gradients disclosed by Suzuki in combination with concentric (radial) color gradient disclosed by Sakamoto, and motivated to combine the teachings because it would reduce the load for drawing a gradation as revealed in col. 2, lns. 8-11.

E. Claim 26, "The method of claim 1, wherein the set of attributes ... contour ... in the color gradient" is disclosed by Suzuki supra for claim 1. However Suzuki does not appear to disclose "wherein the set of attributes ... contour ... in the color gradient", but Sakamoto does in col. 7, lns. 63-67.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply color gradients disclosed by Suzuki in combination with concentric (radial) color gradient disclosed by Sakamoto, and motivated to combine the teachings because it would reduce the load for drawing a gradation as revealed in col. 2, lns. 8-11.

F. Claim 27, "The method of claim 26, wherein defining a mathematical function ... non-linear mathematical function" is disclosed by Suzuki supra for claim 26 and 23.

G. Claim 28, "The method of claim 26, wherein defining a mathematical function ... user input ... mathematical function" is disclosed by Suzuki supra for claim 26 and 25.



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H. Per dependent claims 42-44, 49 and 55-57, these are directed to a computer program product for performing the method of dependent claims 13-15, 20 and 26-28 and therefore are rejected to dependent claims 13-15, 20 and 26-28.

*Allowable Subject Matter*

8. Claims 21 and 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Responses*

9. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231. If applicant desires to fax a response, (703) 308-9051 may be used for formal communications or (703) 308-6606 for informal or draft communications.

Please label "PROPOSED" or "DRAFT" for informal facsimile communications. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

*Inquiries*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Cunningham whose telephone number is (703) 308-6109.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached on (703) 308-6829.

**Any response to this action should be mailed to:**

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Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9306 (for Technology Center 2600 only)**

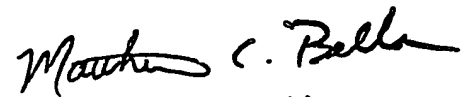
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the Technology Center 2600 Customer Service Office whose telephone  
number is (703) 306-0377.



gfc

September 24, 2003



MATTHEW C. BELLA  
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